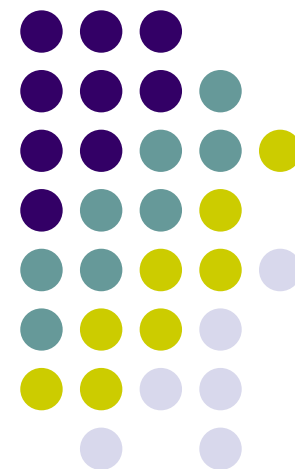
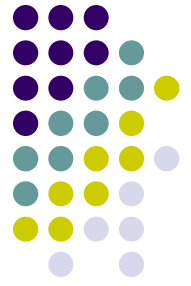


# Designations for 24-Hour PM2.5 NAAQS: Overview and Guidance

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PM2.5 Workshop  
June 20-21, 2007





## 24-Hour PM<sub>2.5</sub> Designation Requirements

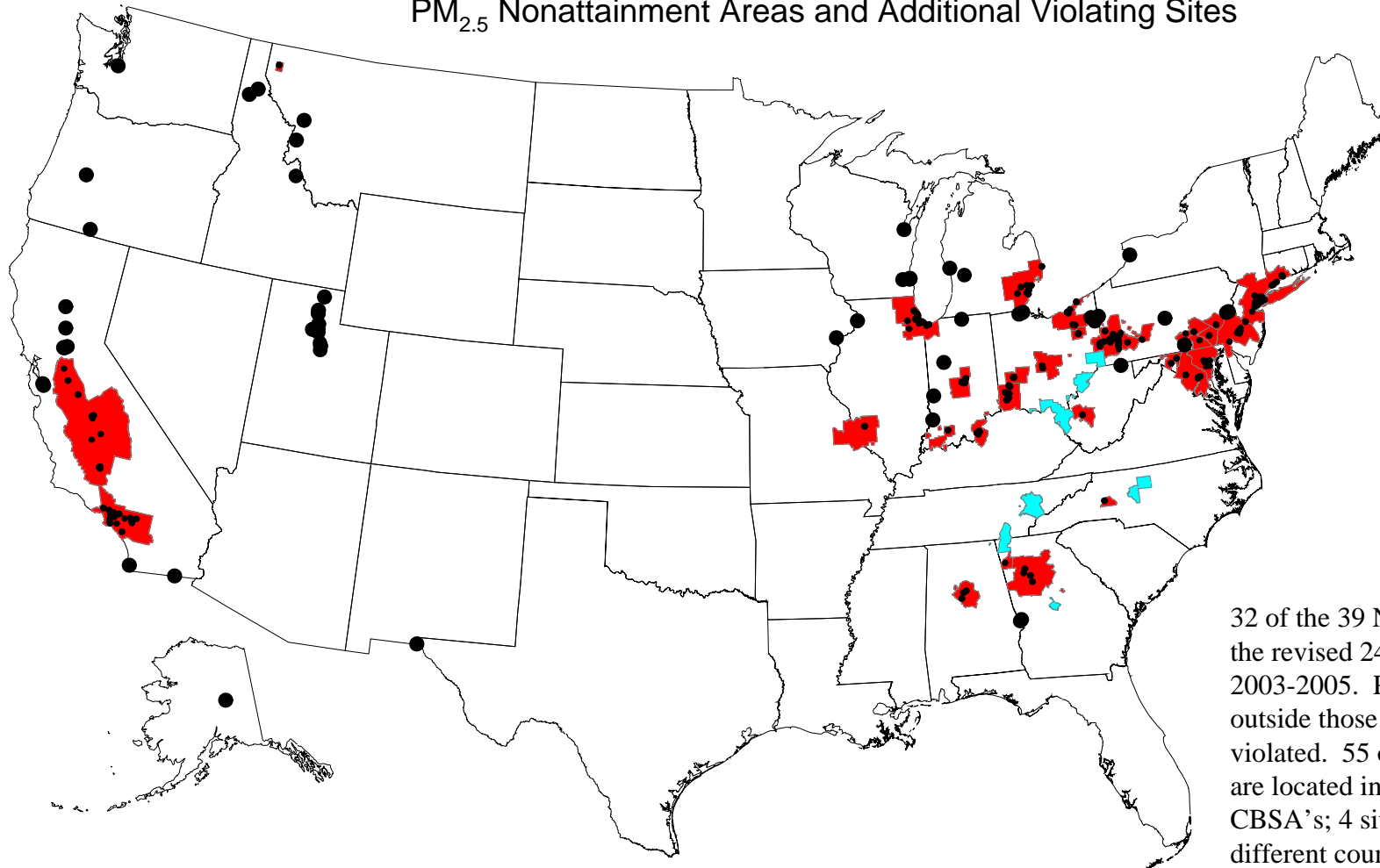
- PM<sub>2.5</sub> NAAQS was revised for the 24-hour PM<sub>2.5</sub> standard only, lowered from 65  $\mu\text{g}/\text{m}^3$  to 35  $\mu\text{g}/\text{m}^3$ .
- Effective date of the revised PM standards is 12/18/06.
- Section 107(d)(1) requirements for new designations:
  - Governors must make recommendations no later than 12/18/07.
  - EPA must notify States and Tribes of any modifications no later than 120 days prior to the final designations date.
  - EPA is required to make final designations not later than 2 years after promulgation of the revised NAAQS (12/18/08); this date may be extended for up to 1 year if EPA has insufficient information to promulgate the designations (12/18/09).

# Areas Violating Revised 24-Hour PM<sub>2.5</sub> NAAQS (2003-2005 data)



- Approximately 70 areas are violating the 2006 24-hour PM<sub>2.5</sub> NAAQS (based on 2003-2005 monitoring data)
- Includes 32 of the 39 existing PM<sub>2.5</sub> nonattainment areas
  - Predominantly urban areas and smaller cities
  - All except 3 are in the Eastern U.S.
- 38 are “new” areas (those currently designated attainment for PM<sub>2.5</sub>)
  - Mix of urban areas, smaller cities, and a few non-urban areas
  - About 20 are in the Western U.S.

## 2003-2005 PM<sub>2.5</sub> 24-hour NAAQS Status: PM<sub>2.5</sub> Nonattainment Areas and Additional Violating Sites



32 of the 39 NAA violated the revised 24-hr NAAQS in 2003-2005. Plus, 59 sites outside those NAA also violated. 55 of these 59 sites are located in 34 distinct CBSA's; 4 sites, located in 4 different counties, are not in a CBSA.

- Nonattainment area violates the 24-hour NAAQS (32 areas)
- Nonattainment area meets the 24-hour NAAQS (7 areas)
- Violating site in designated NA area (172 sites)
- Violating site not in a designated NA area (59 sites)

# Key Issues for 24-Hour PM<sub>2.5</sub> Designations Guidance



- Timing of final designations
- Monitoring data
- Identifying sites that violate the 24-hour PM<sub>2.5</sub> NAAQS
- Treatment of data influenced by exceptional events
- Boundary recommendations
- Tribal issues

# Draft Timeline for Designation Process



Milestone	2006 PM2.5 NAAQS Date
State and Tribal recommendations due	Dec. 18, 2007
EPA Response	No later than August 20, 2008 (120 days prior to final designations)
States and Tribes may provide additional comments	Prior to final designations
Final Designations	No later than Dec. 18, 2008*

\* If the EPA Administrator determines that there is insufficient information to make final designations, then the date of final designations may be extended by up to one year but no later than December 18, 2009.



# Monitoring data

- A State should base recommendations on 2004-2006 data.
- In EPA's response to these recommendations and in final designations, EPA plans to:
  - use the most recent 3 years of monitoring data
  - decide on the use of less than complete data on a case-by-case basis
- For a site not exceeding the standard but close to it, a State should monitor the site for exceedances and be aware of the possibility of designation of "nonattainment" based on future data.

# Identifying Sites That Violate the 24-hour PM<sub>2.5</sub> Standard



- In general, violations are identified using data from Federal reference method (FRM) and Federal equivalent method (FEM) monitors that are sited and operated in accordance with 40 CFR Part 58, as revised on October 17, 2006 (see 71 FR 61236).
- Procedures for using these data to determine whether a violation has occurred are given in 40 CFR Part 50 Appendix N, as revised on October 17, 2006 (see 71 FR 61144).



# Treatment of Data Influenced by Exceptional Events



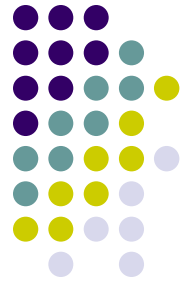
- For 2004-2006 monitoring data, the Exceptional Events rule (March 2007) establishes that:
  - State must submit flags and initial supporting information by October 1, 2007 (extension to Dec. 1 possible).
  - Technical demonstrations must be provided to EPA no later than the final submittal of the Governor's letter with recommended area designations.

# Treatment of Data Influenced by Exceptional Events (cont'd)



- For 2007 monitoring data, the rule requires that supporting documentation be submitted 12 months prior to a regulatory decision (i.e., for Dec. 2008 final designations, supporting documentation would be required by Dec. 2007).
- EPA expects to use 2005-2007 data in responding to State and Tribal designation recommendations. Therefore, States will need to have their documentation and EPA approval completed in advance of EPA using the 2007 data for designations.

# Boundary Recommendations

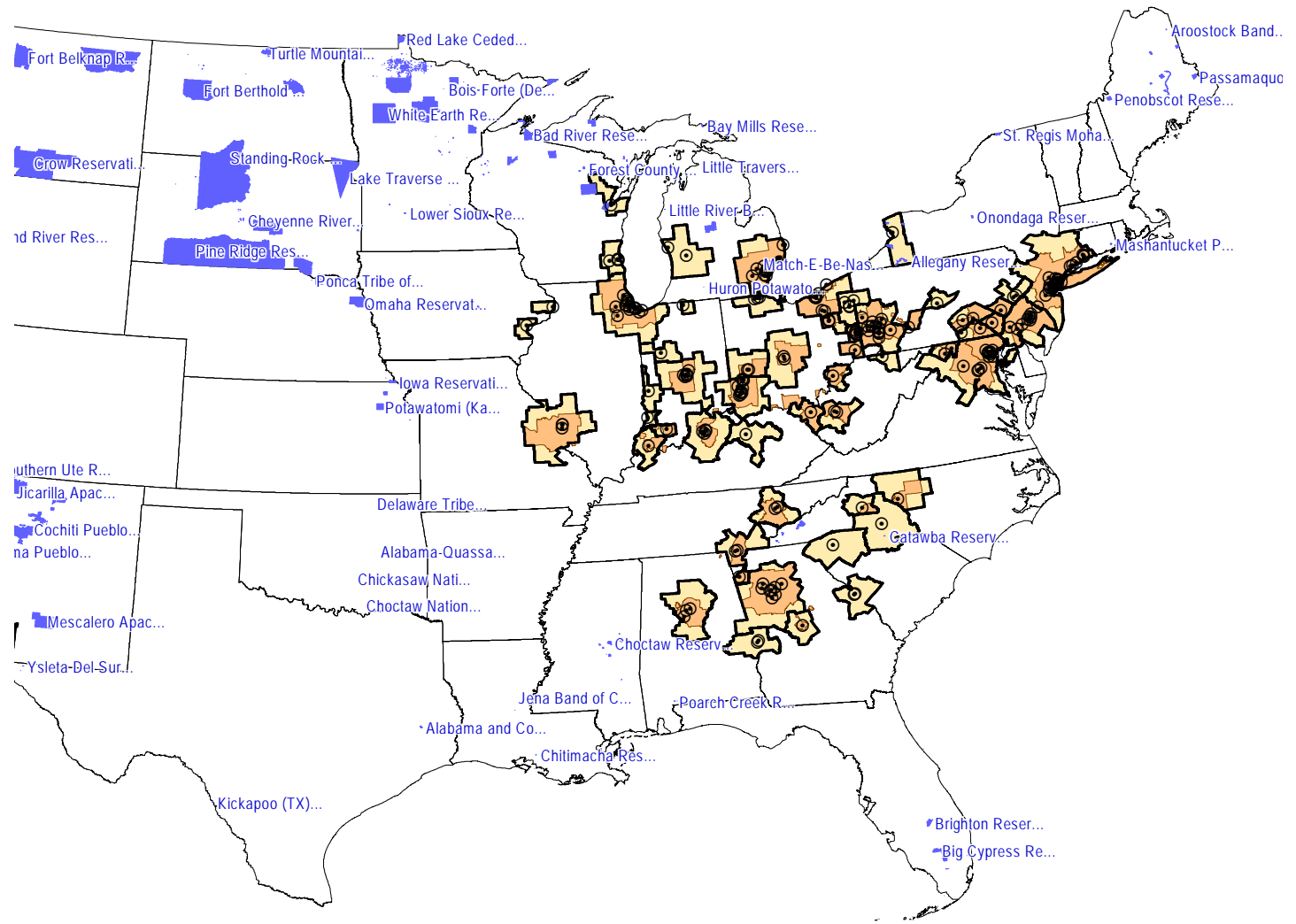


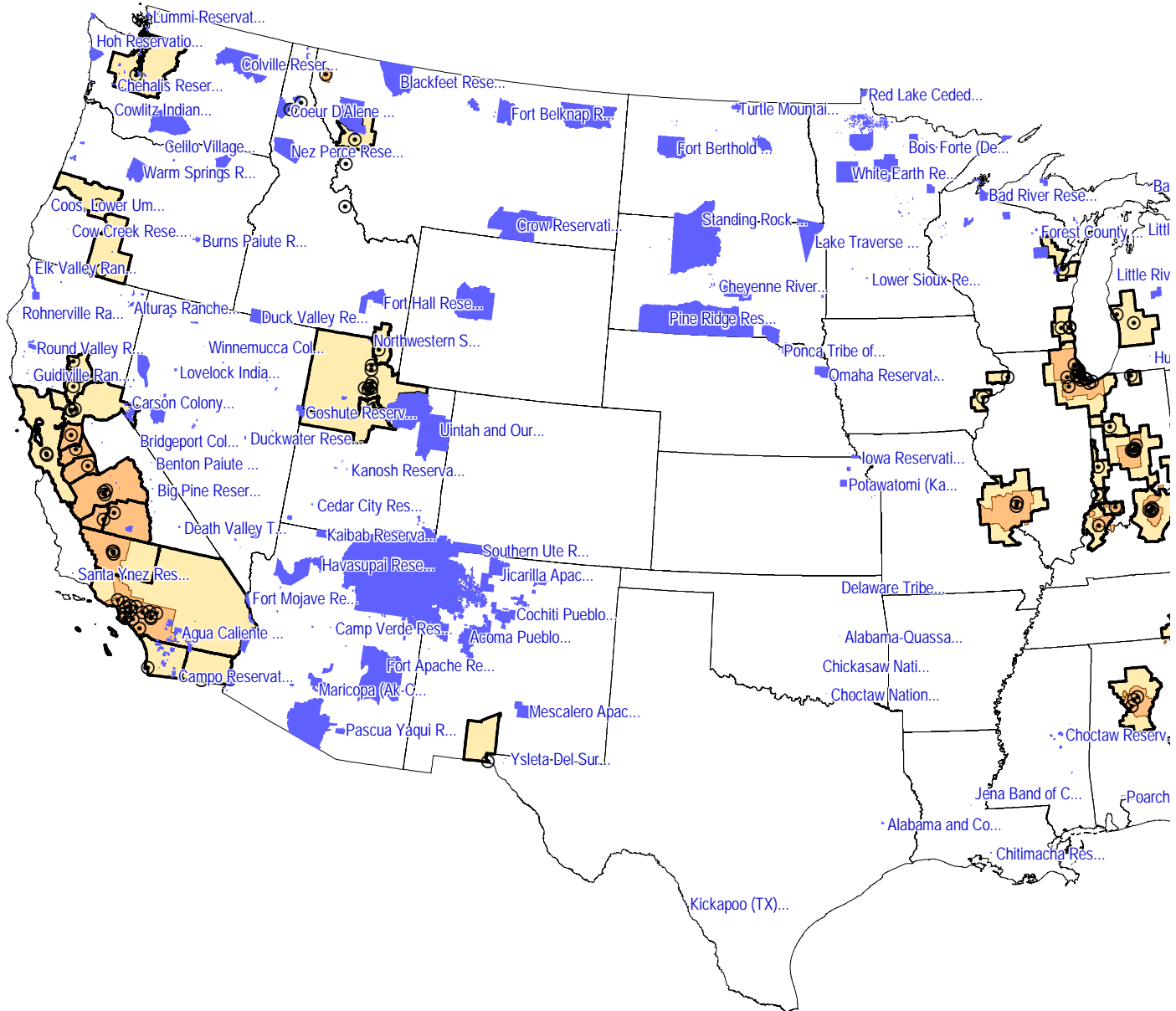
- Each area should be assessed on a case-by-case basis.
- A nonattainment area must include not only the area that is violating the standard but also nearby areas that contribute to the violation.
- Boundary recommendations should be based on an evaluation of the nine factors used in the prior PM2.5 designations process, as well as any other relevant factors or circumstances specific to a particular area.
- The same boundaries established for implementing the 1997 PM2.5 NAAQS may also be appropriate for implementing the 2006 24-hour PM2.5 NAAQS in areas where both sets of standards are violated .

# Factors to Consider for Boundary Recommendations



- Emission data
- Air quality data
- Population density and degree of urbanization (including commercial development)
- Traffic and commuting patterns
- Growth rates and patterns
- Meteorology (weather/transport patterns)
- Geography/topography (mountain ranges or other air basin boundaries)
- Jurisdictional boundaries (e.g., counties, air districts, Reservations, metropolitan planning organizations)
- Level of control of emissions sources



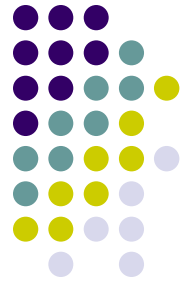




## Tribal issues

- A few newly violating areas appear to be near Tribal lands
- We will follow generally the same process for Tribes (e.g., schedule) as for States (based on CAA sections 110(o) and 301(d) and the Tribal Authority Rule (TAR))
- Process is somewhat different for the Tribes:
  - No set timeframe by which Tribes are required to make designation recommendations; Tribes are encouraged to meet same time frames as States
  - Nonattainment areas do not follow Tribal boundaries
  - Tribes may question nonattainment status if no air monitors on reservation, or the area designated is very large
- We will maintain the policy of offering to help Tribes obtain relevant information addressing the factors

# Plans for Communication of Guidance and Other Designation Information



- Each EPA Regional Office notified their State Air Quality Directors and Tribal Air Contacts by email and provided the guidance.
- Goal is to distribute the designations guidance to Governors & Tribal leaders by no later than June 30.
- The designations guidance is available at:  
<http://www.epa.gov/ttn/oarpg/t1pgm.html>
- We also plan to post the guidance and fact sheet on the PM designations website.
- Data and tools for use in analysis of the nine factors will be made available at an EPA website, TBD. We will notify EPA work group, workshop attendees, NACAA, and NTAA.
- We will continue to meet with NACAA, NTAA, and other stakeholders.